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ABSTRACT

This document reports on the financial condition of 48 liberal arts colleges. Emphasis is placed on the deficit picture between 1970 and 1973; income and expenditure trends for the 48 colleges; implications of the decline in expenditure growth; needed measures of inflation and real resource growth; indicators of financial and academic health in higher education. Data for the 48 colleges confirm that 1970 marked a turning point. Accelerating expenditure growth outstripped income growth, thereby producing more numerous and larger deficits from 1967 to 1970; these trends were reversed from 1971 to 1973 as expenditure growth declined dramatically. Expenditure trends suggest that "quality distress" may replace "financial distress" in the 1970's. Surpluses are increasing, but real resource growth has come to a virtual halt at these 48 colleges. Survival may become the dominant operating principle, with quality deterioration a byproduct. (Author/MJM)

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AT THE CROSSROADS

A Report on the
Financial Condition of the
Forty-Eight Liberal Arts Colleges
Previously Studied in
The Golden Years
The Turning Point

Presented to the Board of Regents
of the University of Michigan

*University of
Michigan*

The Board of Regents of the University of Michigan
has approved the report of the Center for the Study of
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Center for the Study of Higher Education
School of Education, The University of Michigan
Ann Arbor, Michigan

April
1974

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AT THE CROSSROADS

A Report on the Financial Condition of the
Forty-Eight Liberal Arts Colleges

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The Golden Years

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by

G. Richard Wynn

Center for the Study of Higher Education
School of Education
The University of Michigan
Ann Arbor, Michigan

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The ideas of my colleague and friend, Hans H. Jenny, are interwoven throughout this report. His penetrating critique of several rough drafts has been greatly appreciated. The comments of Joseph P. Cosand, James L. Miller, Jr., and Donald M. Norris, all of the Center for the Study of Higher Education at The University of Michigan, have also added immeasurably to the document.

Careful proofreading by my wife, Kathy, has saved our dictionary from considerable wear and tear. Her greatest contribution, however, has been to prick an occasional pretentious bubble by offering a layperson's view of this topic.

Although I owe much to these individuals, the responsibility for all that is contained here is, of course, my own.

G. Richard Wynn
Ann Arbor, Michigan
April, 1974

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ABSTRACT

Several years ago Hans H. Jenny and G. Richard Wynn reported on the financial condition of 48 liberal arts colleges from 1960 to 1968 in The Golden Years, which referred to the prosperous early and middle 1960's enjoyed by these colleges. The Turning Point updated their data through 1970, indicating the worsening financial condition of the 48 colleges. Jenny and Wynn were thus among those researchers who documented what some came to call a financial crisis in higher education.

This report provides data for the 48 colleges updated to 1973. And, ironically, it confirms that 1970 was indeed a turning point, but in unforeseen directions. While accelerating expenditure growth outstripped income growth, thereby producing more numerous and larger deficits from 1967 to 1970, these trends were reversed from 1971 to 1973, as expenditure growth declined dramatically and black ink replaced red.

But there is little cause for rejoicing. While an overemphasis on operating deficits might lead some to view these changes optimistically, G. Richard Wynn argues here that a new era of vulnerability may have set in for these colleges. Expenditure trends suggest that "quality distress" may replace "financial distress" as the key words of the 1970's. Surpluses are increasing, but real resource growth has come to a virtual halt at these 48 colleges. Survival may become the dominant operating principle, with quality deterioration a by-product.

These colleges collectively are "at the crossroads." Ahead may lie renewed growth, and financial and academic success; continued cost pressures that lead to widespread financial and academic bankruptcy; or a new stability, with or without quality intact. The difficulty in predicting which scenario will dominate the years immediately ahead is the lack of accurate and timely indicators of financial and academic conditions. Until such indicators are developed, implemented, and utilized to analyze the current situation, public policy will be blind to which road these colleges are traveling, and can offer little constructive assistance.

I. INTRODUCTION: FINANCIAL DISTRESS IN HIGHER EDUCATION

Although the financial difficulties of higher education have received considerable publicity in recent years, the seriousness of the situation continues to be debated. The recent report of the National Commission on the Financing of Postsecondary education,* in reviewing studies of the financial issue, finds little unanimity of expert opinion. Some believe a true crisis exists, while others find little of concern. The prevailing sentiment may well be captured in the Commission's use of the more muted "financial distress" rather than "financial crisis."¹

One of those cited by the National Commission report as concerned with widespread "financial and academic bankruptcy" is William W. Jellema. Summarizing his findings for a broadly-based sample of private institutions, Jellema concludes, "much of private higher education has been undergoing a financial crisis of grave proportions."² One of the key indicators on which he bases his findings is the increasing number and severity of deficit positions in current operations from fiscal 1968** to fiscal 1971.³

Earl F. Cheit's data in 1971 supported those of Jellema and were nearly as pessimistic.⁴ However, in his update two years later, Cheit was cautiously optimistic; "It is fair to say that most (of his sample schools) have gone from a financial condition of steady erosion to one of fragile stability" (emphasis added).⁵ In particular, Cheit documented a significant drop in the rate of expenditure growth that had been a major cause of financial distress. However, he paid much less attention to deficits as an indicator of distress, relying more on structural changes in expense and income flows, and institutional self-reporting.

* Hereafter referred to as the National Commission.

** Throughout the remainder of this report, the years will always refer to the fiscal year, which roughly coincides with the academic year. Thus, 1968 covers the fiscal and academic year 1967-68.

Most recently, cause for renewed optimism has come from Carol Van Alstyne, chief economist for the American Council on Education, who feels that

the financial prospects for higher education are brighter than the published reports (have) indicated. It is not a time for despair and retrenchment, but for hope and planning, to make future realities out of present possibilities.⁶

Her warning that income trends of higher education must be placed in an historical perspective is a valuable contribution. Recent studies have been limited to relatively short time periods, concentrating on short-term trends and ignoring important cyclical movements. Overall favorable changes in private, state, and federal support are the major sources of Van Alstyne's optimism. However, she fails to deal adequately with enrollment trend data and its impact on income generated from students, particularly in private higher education.

This brief synopsis of contrasting views of financial distress overlooks many important studies, but includes those most relevant to the new findings reported here. Data for 48 private liberal arts colleges are studied from 1960 to 1973, thus cutting across the major cyclical changes noted by Van Alstyne. The following analyses probe the trends in expenditures, income, and deficits for these colleges, moving beyond the use of deficits as a major indicator of distress. The report documents and expands on a key factor with which these colleges may have to cope in the 1970's--decreasing rates of expenditure growth. Some implications of these new financial constraints and the need to develop better indicators of financial and academic health are discussed.

II. THE DEFICIT PICTURE: BEYOND THE TURNING POINT

The Picture to 1970

When Hans Jenny and I titled our first study of these 48 colleges The Golden Years,⁷ we were referring to the generally prosperous early and mid-1960's. Enrollments grew slowly but steadily, a building boom was peaking, faculty and staff salaries were approaching desired levels, and

peaceful campuses were the rule. The 48 colleges collectively finished each year with an operating surplus. But during the last several years of our study, ending in 1968, clearcut signs of financial distress became apparent, even for this sample of fairly well-to-do colleges.⁸

Our update to 1970 was The Turning Point,⁹ dramatizing how the addition of only two fiscal years brought an end to the golden years in a splash of red ink. Income was unable to keep pace with accelerating expenditure growth, particularly student aid.¹⁰ Enrollment dropped drastically in several institutions, benefactors proved fickle, and increasing price competition from public systems took its toll.¹¹ A faculty colleague suggested, only partly in jest, that if the trends of the late 1960's continued, our studies should become a trilogy, culminating in an apocalyptical "Down the Tubes."

Changes Between 1970 and 1973

Yet if deficits are to be used as a major indicator of financial distress, 1970 was a turning point in a new direction. Recently a much briefer examination was made of the 48 sample colleges' audits, to update certain components of the time series through 1973. Table 1 and Graph 1 reveal that this well-to-do sample conformed to the trends found by Jellema until 1970, at which point 60 percent of the sample colleges were running deficits that averaged \$307,000 per college. But since that time, Jellema's From Red to Black? proves to be a most appropriate title.

Today the 48 sample colleges collectively are firmly in the black. The plunge to a collective deficit exceeding seven million dollars in 1970 was followed by an equally sharp recovery. By 1973 the collective surplus was \$3.3 million, an improvement of more than \$10 million in but three years.

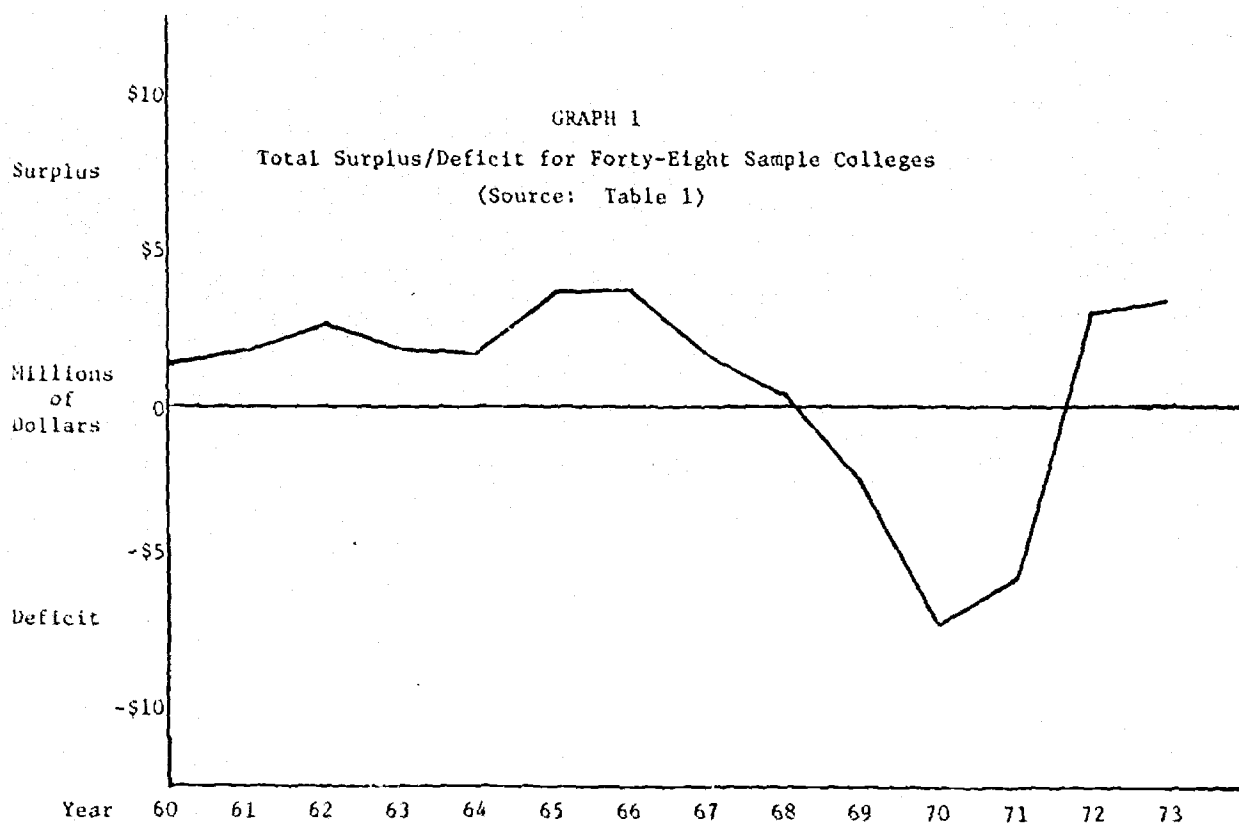
Of course, some institutions suffer during the most prosperous times. Totals for the 48 college sample can hide individual cases of financial distress, if not outright crisis. Table 2 and Graphs 2 and 3 divide the sample into those colleges running surpluses and those running deficits

TABLE 1

Total Expense, Income, and Surplus/Deficit for the
Forty-Eight Sample Colleges, with Year-to-Year Growth Rates

Fiscal Year	Total Expense (000)	Total Income (000)	Surplus/ (Deficit) (000)	Year-to-Year Growth Rates	
				Expense	Income
1960	\$112,140	\$113,456	\$1,316	---	---
1961	123,090	124,872	1,782	9.8%	10.1%
1962	134,891	137,531	2,640	9.6	10.1
1963	148,802	150,592	1,790	10.3	9.5
1964	162,549	164,291	1,742	9.2	9.1
1965	179,202	182,857	3,655	10.2	11.3
1966	196,283	199,987	3,704	9.5	9.4
1967	217,406	219,097	1,691	10.8	9.6
1968	237,533	237,919	386	9.3	8.6
1969	262,482	259,982	(2,500)	10.5	9.3
1970	289,103	281,970	(7,133)	10.1	8.5
1971	312,259	306,588	(5,671)	8.0	8.7
1972	328,384	331,485	3,101	5.2	8.1
1973	344,936	348,239	3,303	5.0	5.1

Annual Compound Growth Rates	Expense	Income
1961-1973	9.0%	9.0%
1961-1965	9.8	10.0
1966-1970	10.0	9.1
1971-1973	6.1	7.3



over the 14 years. The number of colleges in deficit rose steadily from 1965 to 1970, but since that peak year a rapid reversal is apparent (Graph 2). Even in the golden years deficits were not uncommon, but the average size of the deficit was relatively small (Graph 3). The average deficit continued to climb to a high of \$377,000 in 1971, but since has fallen rapidly to \$100,000 in 1973.

The Impact of Inflation

However, traditional analysis of surplus/deficit data has failed to take into account an important factor, the changing value of the dollar. A surplus of \$100,000 in 1973 cannot be directly compared to a \$100,000 surplus in 1960, because the purchasing power of the 1973 dollar is far less than that of 1960. Adjusting for this declining purchasing power by use of the Commerce Department's Implicit Deflator for GNP,* a \$145,000 surplus would be necessary in 1973 to equal the purchasing power of a \$100,000 surplus in 1960. Therefore, surpluses today are less impressive than they might at first appear.

The effects of inflation on a deficit figure make little difference to a college undergoing general financial disaster. But this approach makes the relative size of a deficit comparable over time. Deficits represent expenditures made over and above income available. In 1960, the base year for this study, the average deficit per college was \$43,000 (Table 2 and Graph 3). The 1971 current dollar deficit of \$377,000 is only \$279,000 in 1960 constant dollars, and the still imposing current dollar deficit of \$100,000 in 1973 shrinks to \$69,000 if 1960 constant dollars are used. The dotted line in Graph 3 converts the average deficit to constant dollars. This does not suggest that deficits are no longer a problem, but places the problem in better perspective.

* The Implicit Deflator for GNP was adjusted to correspond to the fiscal year. As will be argued below, the Implicit Deflator for GNP considerably understates the true inflation of a service industry such as higher education.

TABLE 2

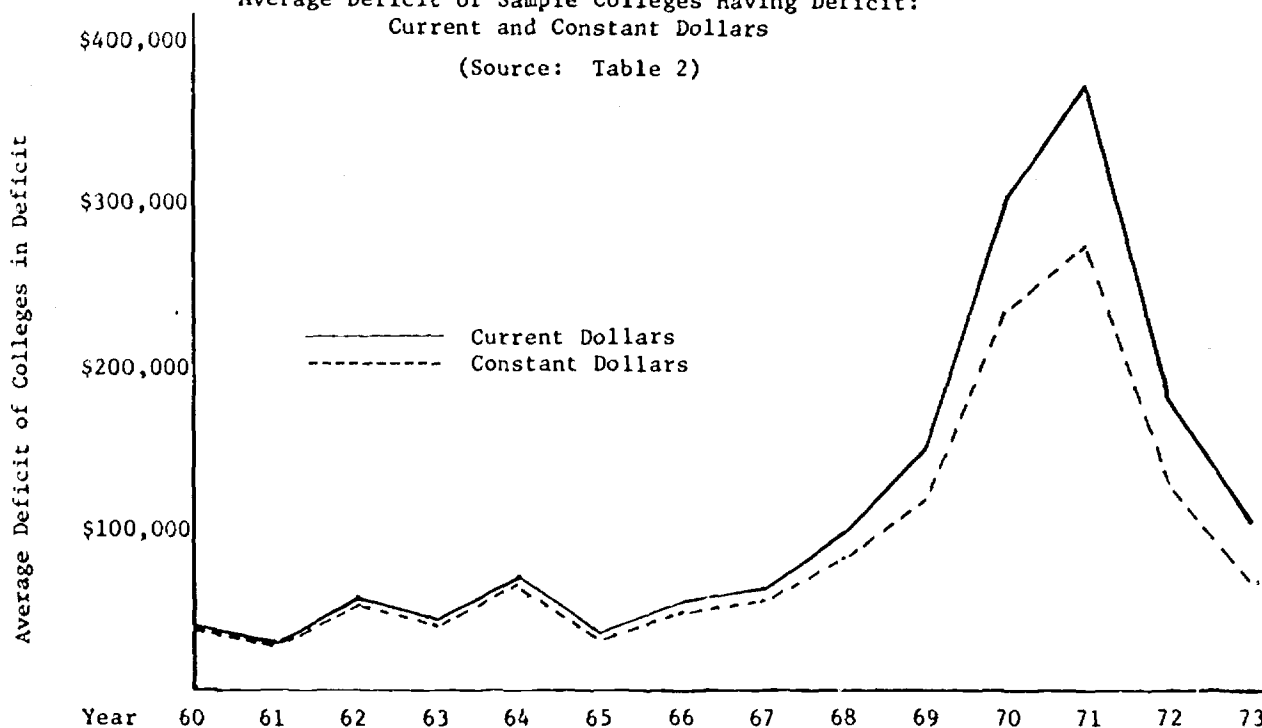
Sample Colleges Divided into Those Having Surpluses and
Those Having Deficits, By Numbers and Dollar Value

Fiscal Year	Colleges Having Surpluses	Total Value of Surplus (millions)	Colleges Having Deficits	Total Value of Deficit (millions)	Average Deficit for Colleges Having Deficits (thousands)	
					Current \$	Constant \$
1960	34	\$1.9	14	\$0.6	\$43	\$43
1961	42	2.0	6	0.2	33	32
1962	43	3.0	5	0.3	60	58
1963	35	2.4	13	0.6	46	44
1964	37	2.6	11	0.8	73	69
1965	43	3.8	5	0.2	40	37
1966	39	4.2	9	0.5	56	51
1967	31	2.8	17	1.1	65	58
1968	27	2.5	21	2.1	100	85
1969	23	1.3	25	3.8	152	124
1970	19	1.8	29	8.9	307	239
1971	26	2.7	22	8.3	377	279
1972	37	5.1	11	2.0	182	130
1973	37	4.4	11	1.1	100	69

GRAPH 3

Average Deficit of Sample Colleges Having Deficit:
Current and Constant Dollars

(Source: Table 2)



The Relationship of Deficits to Total Expenses

Thirteen of these colleges ran deficits exceeding \$200,000 in 1970 and in 1971. In contrast, by 1973 only a single college ran a deficit of more than \$200,000. However, in addition to failure to account for inflation, the absolute size of a deficit can be misleading in another way. An institution with a \$15 million budget can err by only one percent and face \$150,000 of red ink, an amount which it often can take in stride. The same would not be true of a college with a \$3 million budget. Therefore, Table 3 and Graph 4 are the most revealing and relevant, measuring the relative deficit as a percent of total expenses. This eliminates the need for the constant dollar approach, since both total expenses and the deficit are equally subject to the effects of inflation. Here again the general improvement is clear. No sample college had a deficit exceeding five percent of total expenses in 1973, while ten colleges did in 1970, only three years earlier.

How Meaningful Are Deficit Trends?

Superficially, then, the news is encouraging. However, far too much can be made of deficits (or the absence of deficits) as an indicator of financial distress. Any financial administrator knows how easily a stroke of an accountant's pen, a reclassification of this expense and that income, a judicious transfer here and there, can turn red ink to black, and black to red. The National Commission notes that, "Operating deficits are a crude and often misleading measure of financial distress or failure in collegiate institutions."¹²

Deficits have been used to predict financial failure; should we therefore assume that the absence of deficits is a predictor of financial success? Or has too much attention focused on deficit information, obscuring the presence of financial distress and providing misleading signals of financial health? Some notions about why the deficits surfaced and then subsided should be developed. More extensive data are required to make definitive judgments than were assembled for the present report. However, some of the more obvious factors which were operating can be identified. These factors, and their implications, are discussed in the balance of the report.

TABLE 3

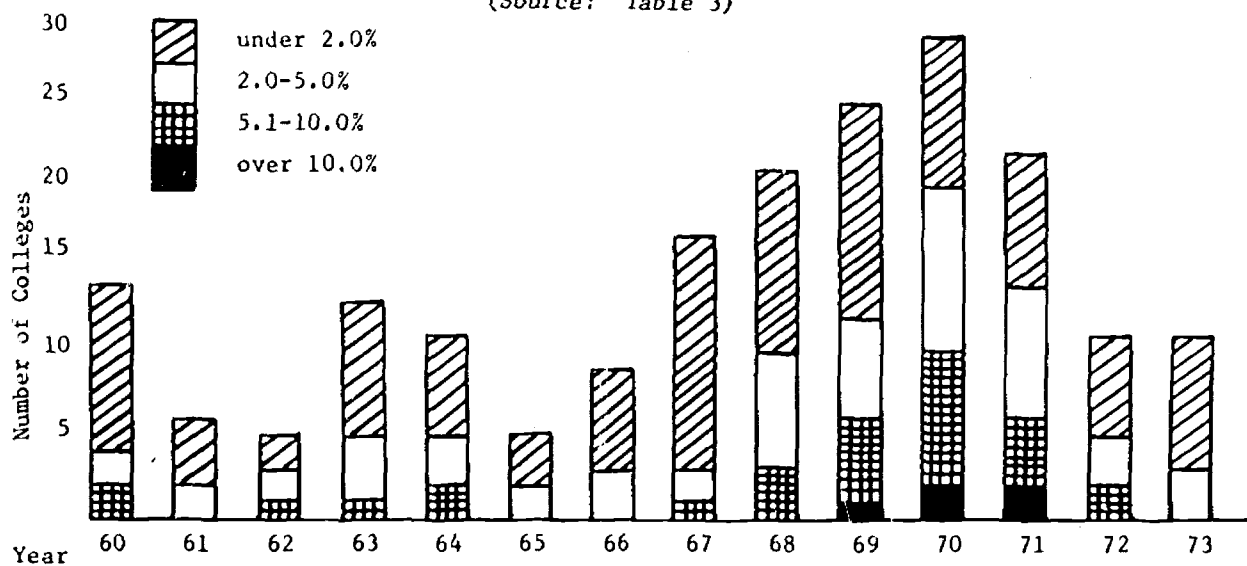
Number of Forty-Eight Sample Colleges Having Operating Deficits,
By Deficit as a Percent of Total Expense

Fiscal Year	Under 2.0 Percent	2.0-5.0 Percent	5.1-10.0 Percent	Over 10.0 Percent	Total Colleges Having Deficits
1960	10	2	2	---	14
1961	4	2	---	---	6
1962	2	2	1	---	5
1963	8	4	1	---	13
1964	6	3	2	---	11
1965	3	2	---	---	5
1966	6	3	---	---	9
1967	14	2	1	---	17
1968	11	7	3	---	21
1969	13	6	5	1	25
1970	9	10	8	2	29
1971	8	8	4	2	22
1972	6	3	2	---	11
1973	8	3	---	---	11

GRAPH 4

Deficits of the Forty-Eight Colleges as a Percent
of Total Expense

(Source: Table 3)



III. INCOME AND EXPENDITURE TRENDS FOR THE FORTY-EIGHT COLLEGES

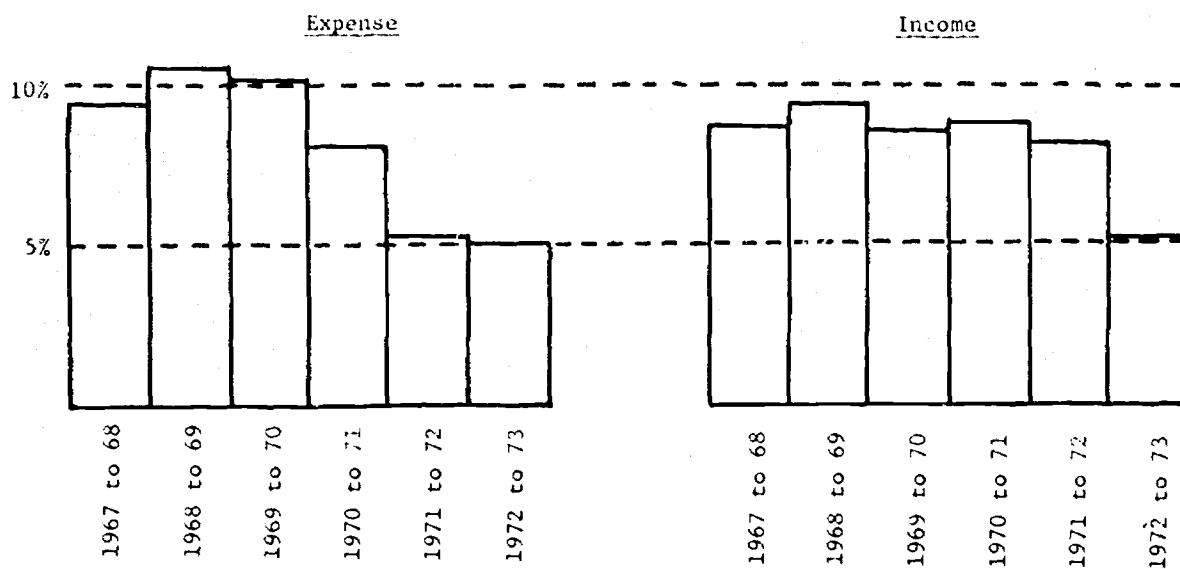
Declining Expenditure Growth for the Forty-Eight Colleges

Referring again to Table 1 (page 4), an important finding is that the rate of growth of income remained relatively steady through 1972, while expenses have increased at a decreasing rate of growth since 1970. The fundamental changes which resulted in both the deficits and the subsequent recovery from deficits were on the expenditure side rather than on the income side.

Graphs 5a and 5b plot these trends for a truncated series from 1967 to 1973, the years of greatest deficit variability. The stability of income growth through 1972 is apparent in Graph 5b. Expense growth follows a more curvilinear path, bowing upward in the critical deficit years, with a flattening of the slope occurring since 1970. Graph 5a is better able to capture these distinct changes in growth rates. Expense growth rates considerably exceeded those of income from 1967 to 1970 (the "turning point" of increasing deficits) and were considerably less than income growth in 1971 and 1972 (recovery from deficits). 1973 growth rates were back in rough balance. (Note also the comparisons of annual compound growth rates at the bottom of Table 1.)

Table 4 and Graph 6 provide a breakdown of total expenses into three major component parts, Educational and General, Auxiliary Enterprises, and Student Aid. Concomitant with the end of the building boom and a slowing of enrollment growth, Auxiliary Enterprises was the first component to undergo a slowing of growth in the mid-1960's. Educational and General expense growth held up until 1971, dropped in 1972, and recovered slightly in 1973. Student Aid expense growth far exceeded that of the other two components, increasing at annual rates of more than 10 percent until 1973. The significant drop in 1973 could conceivably signal that these colleges are no longer willing (or able) to engage in the frantic price competition and discounting of earlier years.

GRAPH 5a
Year-to-Year Percentage Change in Aggregate Income and Expense
(Source: Table 1)



GRAPH 5b
Growth of Aggregate Income and Expense
(Source: Table 1)

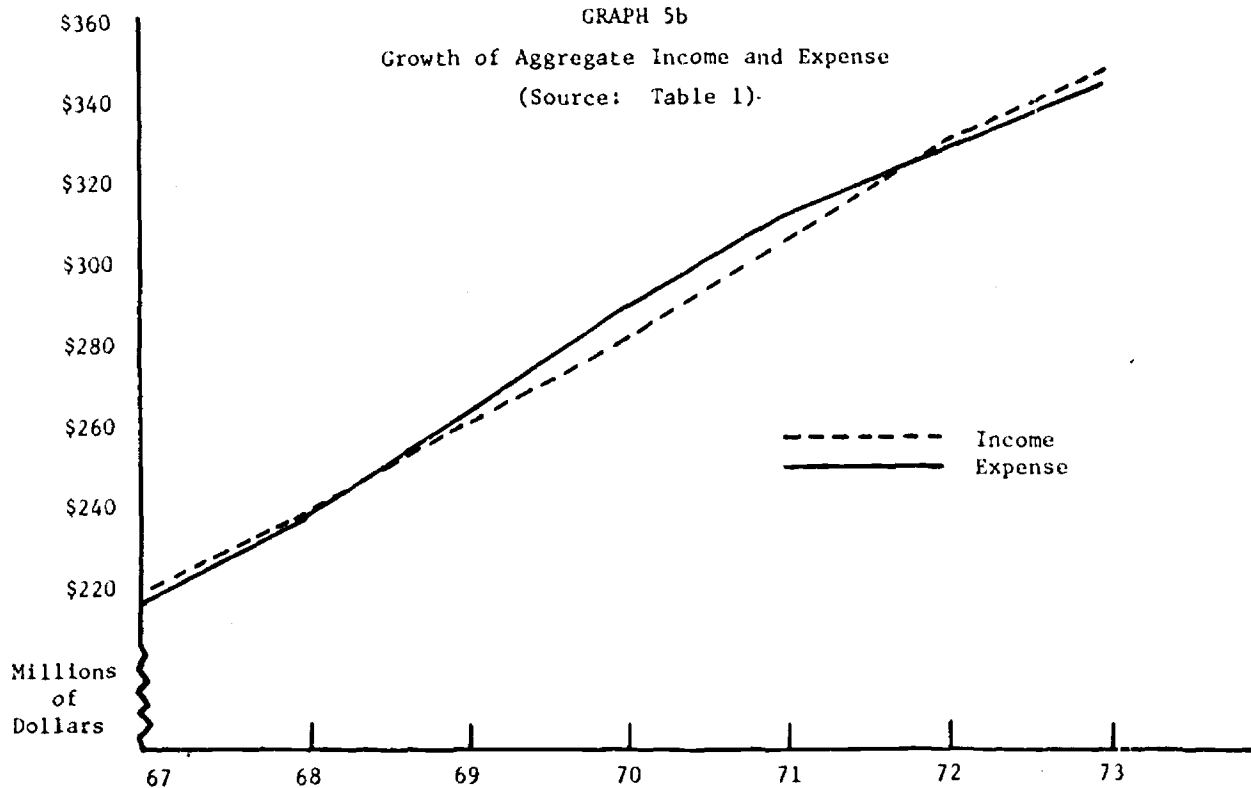


TABLE 4

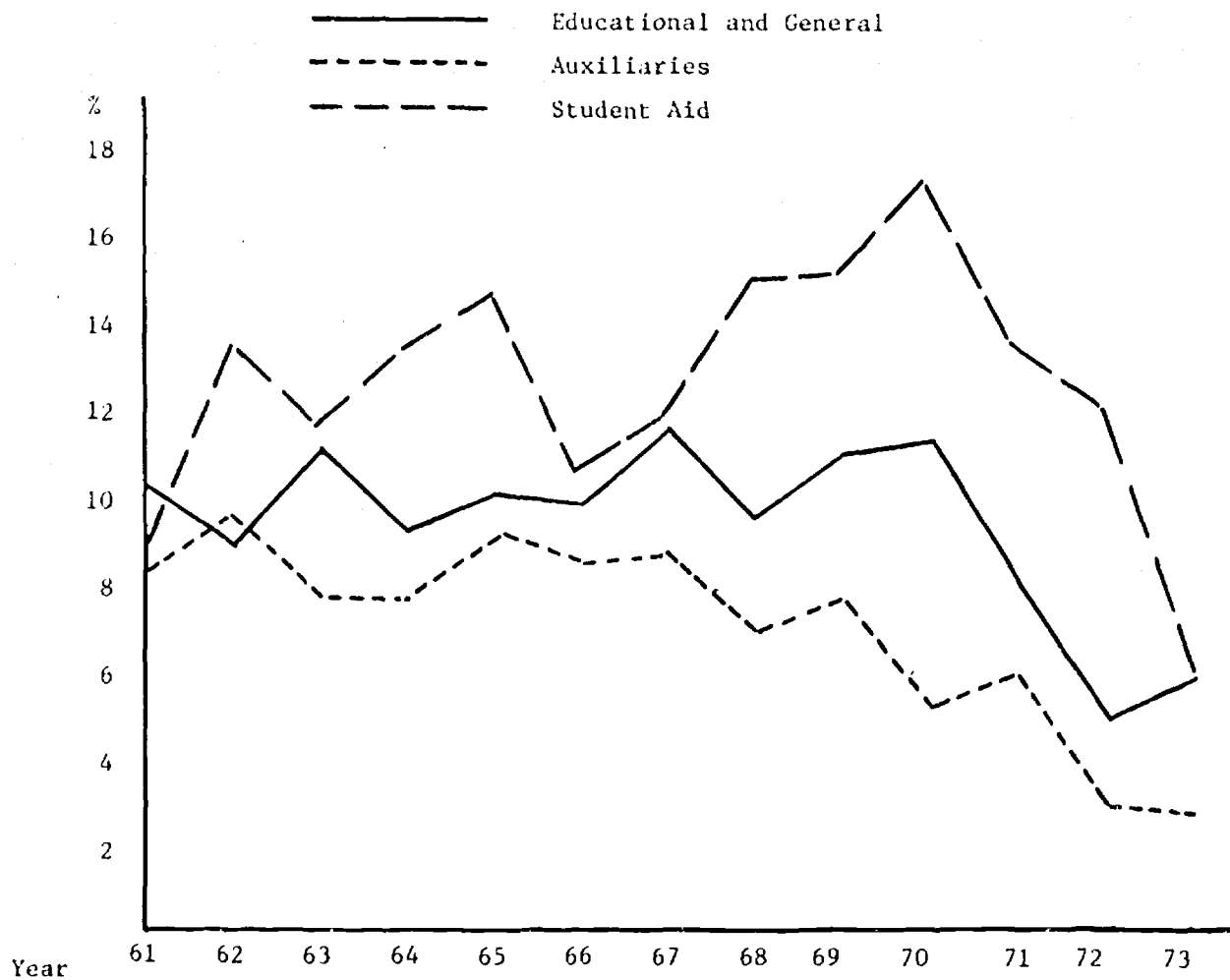
Total Expense, Educational and General, Auxiliary Enterprises,
and Student Aid, with Year-to-Year Growth Rates for
Forty-Eight Sample Colleges

Expenditures (000)				
Fiscal Year	Educational and General	Auxiliary Enterprises	Student Aid	Total Expense
1960	\$70,495	\$33,608	\$8,037	\$112,140
1961	77,924	36,436	8,729	123,090
1962	85,022	39,969	9,900	134,891
1963	94,634	43,117	11,052	148,802
1964	103,512	46,501	12,537	162,549
1965	114,120	50,715	14,368	179,202
1966	125,410	54,984	15,888	196,283
1967	139,928	59,708	17,769	217,406
1968	153,331	63,771	20,431	237,533
1969	170,258	68,713	23,511	262,482
1970	189,321	72,222	27,560	289,103
1971	204,500	76,478	31,281	312,259
1972	214,633	78,699	35,052	328,384
1973	227,027	80,796	37,113	344,936
Year-to-Year Growth Rates				
Fiscal Year	Educational and General	Auxiliary Enterprises	Student Aid	Total Expense
1961	10.5%	8.4%	8.6%	9.8%
1962	9.1	9.7	13.4	9.6
1963	11.3	7.9	11.6	10.3
1964	9.4	7.8	13.4	9.2
1965	10.2	9.1	14.6	10.2
1966	9.9	8.4	10.6	9.5
1967	11.6	8.6	11.8	10.8
1968	9.6	6.8	15.0	9.3
1969	11.0	7.7	15.1	10.5
1970	11.2	5.1	17.2	10.1
1971	8.0	5.9	13.5	8.0
1972	5.0	2.9	12.1	5.2
1973	5.8	2.7	5.9	5.0
Annual Compound Growth Rates	Educational and General	Auxiliary Enterprises	Student Aid	Total Expense
1961-1973	9.4%	7.0%	12.5%	9.0%
1961-1965	10.1	8.6	12.3	9.8
1966-1970	10.7	7.3	13.9	10.0
1971-1973	6.3	3.8	10.5	6.1

GRAPH 6

Year-to-Year Percentage Changes in Expense Components

(Source: Table 4)



Declining Expenditure Growth in Higher Education

These new data for liberal arts colleges support similar findings for other sectors of higher education. In his study of 41 institutions (private and public, large and small), Cheit documented the change for the years 1971 to 1973, "It is clear for this period at least, the schools are operating at sharply reduced rates of expenditure growth."¹³ The National Commission report implies that the data for these 48 private colleges may actually understate the case; "On balance, it appears that the per-student expenditure growth has slowed more in public than in private colleges and universities between 1969 and 1972."¹⁴ These studies refer to expenditure growth per student. Preliminary enrollment data suggest that in the 1970's the 48 sample colleges have continued the very slow enrollment growth they experienced in the 1960's.¹⁵ Hence there is little difference between the trends of aggregate and per student expenditure growth for the additional years 1971 to 1973.

Both encouraging and discouraging implications may be drawn from these findings. Friends and critics of higher education have long called for the industry to take action to reduce expenditure growth. Ernest Boyer has suggested that in the 1970's, "higher education will be expected to do more with less."¹⁶ But it may have been the red ink of the late 1960's that brought about what moral suasion could not.

And so the fat has been trimmed, in some cases quite possibly to the bone and beyond. Cheit notes in his 1973 follow-up that "cost control has escalated to an extraordinary degree."¹⁷ He found that much of the holddown occurred in faculty salaries and deferred maintenance. Joseph Froomkin has suggested that balanced budgets have been "made possible at the expense of the professional staff."¹⁸ The audits of the 48 sample colleges indicate that expenses also have been reduced for the "extras"--travel allowances, memberships, supplies--general cutting of expenditures that hopefully will only marginally affect the institution. But such cost cutting can bring with it new dangers.

IV. IMPLICATIONS OF THE DECLINE IN EXPENDITURE GROWTH

Van Alstyne's warning against reading too much into short-run trends must be heeded. Her data indicate that income, and hence expenditures, will start to climb if they have not already done so. Thus, the data for these 48 colleges may represent a trough, with an upturn imminent. But a dangerous fundamental condition may have been built into the expenditures of these 48 liberal arts colleges, leading to the potential for (1) more severe financial distress, even crisis, and/or (2) a new and more subtle kind of financial distress, what Joseph Cosand of the University of Michigan, among others, has called quality distress.¹⁹

Increased Vulnerability to Financial Distress

As many have noted, "trimming the fat" tends to be a one-shot operation. Once the fat is gone, an institution has become much more vulnerable than it was when a cushion of resources existed. Cheit has called this "fragile stability;" "it would not take much to destroy the stability and force the institutions on a downward course again."²⁰

But with increased vulnerability, with the cushion no longer available to provide a margin when cost-cutting becomes necessary, that downward course may perforce be Jellema's spectre of widespread failure. Vulnerability may mean that an institution can no longer survive another enrollment decline, another disenchanted benefactor, more competition from two-year institutions. With its defenses stripped away, financial "crisis" may truly replace financial "distress" as the critical issue. We may be viewing today a new era of vulnerability not recently faced by these colleges. And there is evidence that liberal arts colleges are not unique in this respect. Such vulnerability may well apply to all of higher education.

Mounting deficits may give us some rough measure of disequilibrium in the higher education industry. If that disequilibrium is caused by too many colleges offering essentially the same educational program, then

massive and sustained deficits suggest that a necessary pruning of the number of colleges may be occurring. In light of enrollment and other long-run projections, such pruning may be required to ensure the better overall health of the industry. However, deficits are the symptom, not the disease. The disease is to be found in expenditure and income trends, and elsewhere.

Unfortunately, proper analysis has not been made of whether the right institutions are failing. It may well be that consumer choice is driving out colleges which educationally have little to offer. This is the conventional wisdom in many circles, and suggests that a corrective market mechanism is at work.

However, the market model does not take into account the fact that, in terms of financial resources, all colleges do not start "equal." Those with ample resources may be able to "play it safe," focusing on survival at all costs. But some colleges which have introduced new educational ideas, which have chosen to take academic risks, are not "elite," are underfinanced, and are highly vulnerable. Anyone familiar with liberal arts colleges can name several such institutions which have recently failed, or are close to doing so.

Thus, higher education may be losing part of its cutting edge of innovation. If, in the course of offering innovative programs, these colleges are going out of business, while those who stand pat survive, higher education is being seriously wounded. The point is not that this is happening. The point is: does anyone know that it is not? A sound policy for higher education requires an answer to this question.

A New Threat: Quality Distress

Increased vulnerability and potential failure are the first dangers suggested by these expenditure trends. Another danger, more subtle and pernicious for higher education, can be obscured by an over-emphasis on traditionally analyzed deficit data. We could reach an unfortunate equilibrium where few colleges run deficits, but many undergo a largely

invisible loss in the quality of their educational program. Financial distress may give way to quality distress.

Vulnerability is again the key. It was suggested above that some vulnerable colleges, with the cushion gone, will simply go under. Other (possibly most) colleges, when faced with financial stringencies, may survive by cutting into one of their last reserves--their quality. Jellema offers an eloquent analogy of this possibility.

An institution barely afloat, with water nearly over the gun-whales, has lost much of its maneuverability, its adventurousness, and freedom of experimentation. Its innovation and risk-taking is confined to putting to sea each academic year. Most ominously, it has no protection against storms . . . the first thing it does in troubled financial seas is jettison cargo.²¹

The first cargo overboard, of course, is the least essential. But if the storm continues, a floundering college may jettison, in the battle to stay afloat, cargo that strikes deep into its quality. In this sense, those colleges not running deficits may be the ones in quality distress. Colleges which have maintained their programs in "troubles seas" may have followed the correct short-run strategy. It is possible that in the late 1960's and early 1970's, deficits were helpful, even required, to preserve the level of the educational program offered. Today such deficit financing may no longer be an alternative. Increased vulnerability may mandate that budgets be balanced, with a long-run survival strategy taking precedence over program needs.

The difficulty in proving this case is that there does not exist in higher education anything approaching a consensus on what is meant by quality. Nor have attempts to measure quality met with much success. It is difficult to convince the public that higher education is suffering from the deterioration of something that cannot be defined nor measured. On the other hand, the inability to measure quality does not mean that the problem will go away.

V. NEEDED: MEASURES OF INFLATION AND REAL RESOURCE GROWTH

A possible approach to the quality dilemma that has received increased attention recently is the attempt to measure real resource growth per student. By eliminating the effects of inflation on current dollars expended, a measure of real resources can be determined which, when properly applied, could be used to develop proxy indicators of quality.²²

Library Expenditures and Real Resources

Library expenditures provide a good example of the concept of real resources. Hans Jenny and this author currently are working under the generous support of the Ford Foundation on a project designed to investigate the development of higher education price and wage deflators. A report on these findings will be available later this summer.²³ Research for this project indicates that libraries face rates of inflation very nearly twice that of the Implicit Deflator for GNP. As is true of other expense categories in this service industry, libraries are quite labor intensive, and wage rates have risen considerably faster than general inflation in the economy. In addition, prices of library materials (books, periodicals) have been rising even more rapidly, more than doubling since 1960.

If the prices libraries must pay are rising six percent annually, library budget allocations must exceed six percent for the library to increase its real resources. An example of this principle appears in Table 5 and Graph 7, which present actual data for a single liberal arts college in the Ford Foundation study. The deflator for library materials is taken from a recent major study of academic libraries.²⁴ This deflator, 6.5 percent compounded annually based on 1958 to 1968 data, is probably on the low side for the period 1969 to 1973, which were years of increasing general inflation. These results, therefore, may actually understate the situation.

Table 5 reveals that in 1973, this college was spending \$55,000 more in current dollars on library materials than it had in 1964. However, in

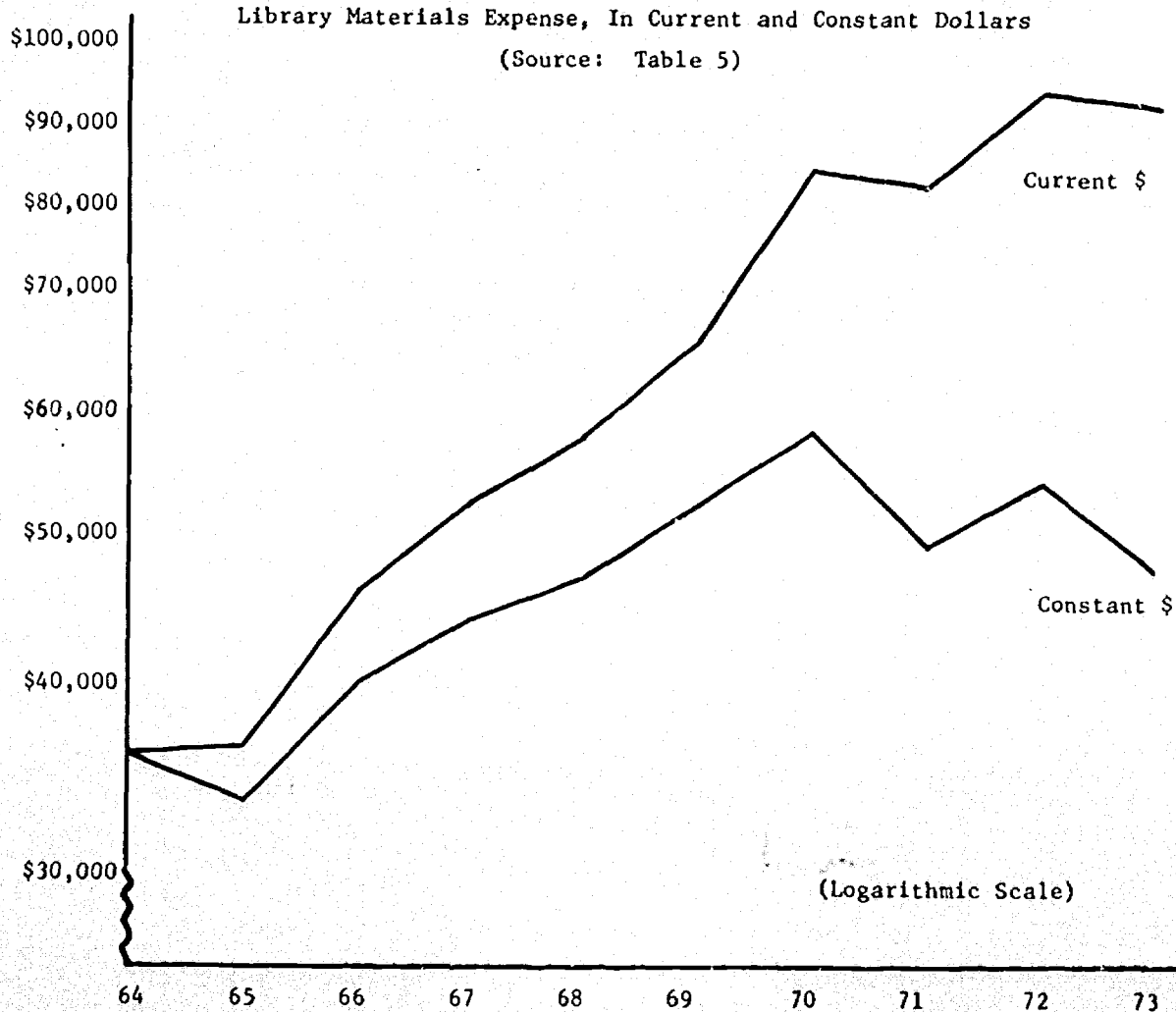
TABLE 5

Library Materials Expense for a Liberal Arts College, 1964 to 1973,
In Current and Constant (Deflated) Dollars

Fiscal Year	Deflator Index	Current Dollars	Constant Dollars
1964	100.0	\$36,536	\$36,536
1965	106.5	36,816	34,569
1966	113.4	45,941	40,512
1967	120.8	51,713	42,809
1968	128.6	56,795	44,164
1969	137.0	65,866	48,077
1970	145.9	83,769	57,415
1971	155.4	81,924	52,718
1972	165.5	93,287	56,367
1973	176.2	91,372	51,857

GRAPH 7

Library Materials Expense, In Current and Constant Dollars
(Source: Table 5)



constant dollars its purchases of real library resources were only \$15,000 greater in 1973 than in 1964. The rest of the increased spending was eaten up by higher prices. Note the impact that inflation has had on this college between 1970 and 1973. Although the current dollar library materials budget rose from \$84,000 to \$91,000, this is translated into a \$5,500 reduction in real resources purchased.

With knowledge of the rates of inflation for higher education in general, and knowledge also of the different rates of inflation impacting on Library, Instruction, Administration, and Maintenance costs, real resource growth can be accurately measured. But a problem in determining real resource growth has been the choice of a measure with which to deflate actual dollar expenditures. The usual yardstick chosen is some indicator of general inflation in the economy, such as the Consumer Price Index.²⁵ However, the Consumer and Wholesale Price Indexes, and even the Implicit Deflator for GNP, understate considerably the amount of inflation in a service industry that is as labor intensive as higher education. This would mean that data based on such deflators would overstate real resource growth.

Real Resource Growth for the Forty-Eight Colleges

For this sample of liberal arts colleges, a very rough deflator has been calculated based on the preliminary findings of the Ford Foundation project.²⁶ The deflator was applied to Educational and General expenses for the past decade; Educational and General is the expense component comparable to that used in most other studies.

Aggregate Educational and General expenses for the 48 colleges more than doubled between 1964 and 1973, from \$104 million to \$227 million (current dollars in Table 6 and Graph 8). After adjusting for inflation, however, Educational and General expenses rose only to \$141 million. And most of this real resource growth took place in the 1960's, when annual growth rates consistently exceeded four percent. In contrast, real resource growth from 1971 to 1973 was at a virtual standstill.

However, the key indicator is what has happened to real resources per student. It is not enough to know whether a group of institutions is spending more in constant dollars. The basic question for higher education must be: are the real resources available to the individual student increasing or decreasing?

A slightly different picture emerges when constant dollar Educational and General expenses per student²⁷ are calculated (Table 7 and Graph 9). After an erratic pattern of year-to-year increases in real resource growth per student in the 1960's, a decline in absolute resources per student occurred between 1971 and 1973. The sample colleges were using fewer real resources per student in 1973 than they were in 1970.²⁸

It is not coincidental, of course, that real resources per student were rising in those years when high expenditure growth rates led to increasing deficits. Unfortunately, the improvement in the deficit picture was brought about, at least partially, by cutting expenditure growth so drastically that real resources per student began to fall. This points most clearly to the shortcomings of deficits as indicators of institutional health. Deficit information from 1971 to 1973 might have been interpreted as signaling improved conditions at the same time that educational resources available to the student were being reduced. Accompanying this reduction is the very real possibility of loss of educational quality.

This study could not include data for the current fiscal year, 1974. But the impact of rampant inflation which has struck the economy in the last year can be anticipated. A college budget becomes relatively fixed during its one-year cycle, particularly on the income side. The short-range adjustments that can be made come mainly in expenditures. If increased vulnerability has established a balanced budget constraint for many institutions, the major adjustments to rapid price increases will be further tightening of costs. Therefore, we can anticipate that even greater decreases in real resources per student will occur in 1974.

The quality issue will not easily be resolved to the satisfaction of all. But it should be clear that higher education must develop better

TABLE 6

Educational and General Expenses, In Current and Constant
(Deflated) Dollars, With Year-to-Year Growth Rates

Fiscal Year	Deflator Index	Current \$ (000)	Constant \$ (000)	Constant \$ Index	Year-to-Year Growth Rates
1964	100.0	\$103,512	\$103,512	100.0	---
1965	104.3	114,120	109,415	105.7	5.7%
1966	109.6	125,410	114,425	110.5	4.6
1967	115.1	139,928	121,571	117.4	6.2
1968	121.3	153,331	126,406	122.1	4.0
1969	129.3	170,258	131,677	127.2	4.2
1970	138.4	189,321	136,793	132.2	3.9
1971	145.8	204,500	140,261	135.5	2.5
1972	152.6	214,633	140,651	135.9	0.3
1973	161.2	227,182	140,932	136.2	0.2

GRAPH 8

Aggregate Educational and General Expenses,
In Current and Constant (Deflated) Dollars

(Source: Table 6)

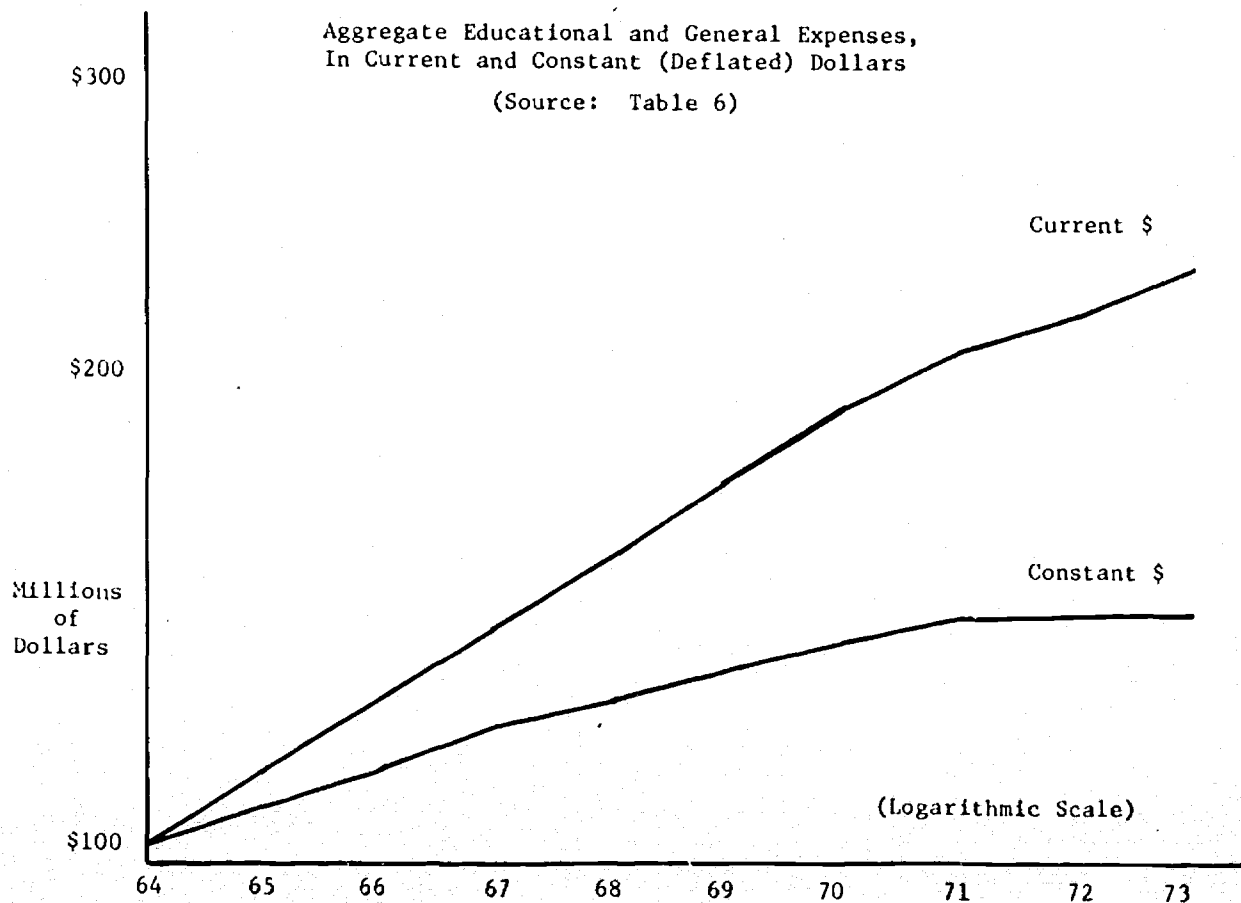


TABLE 7

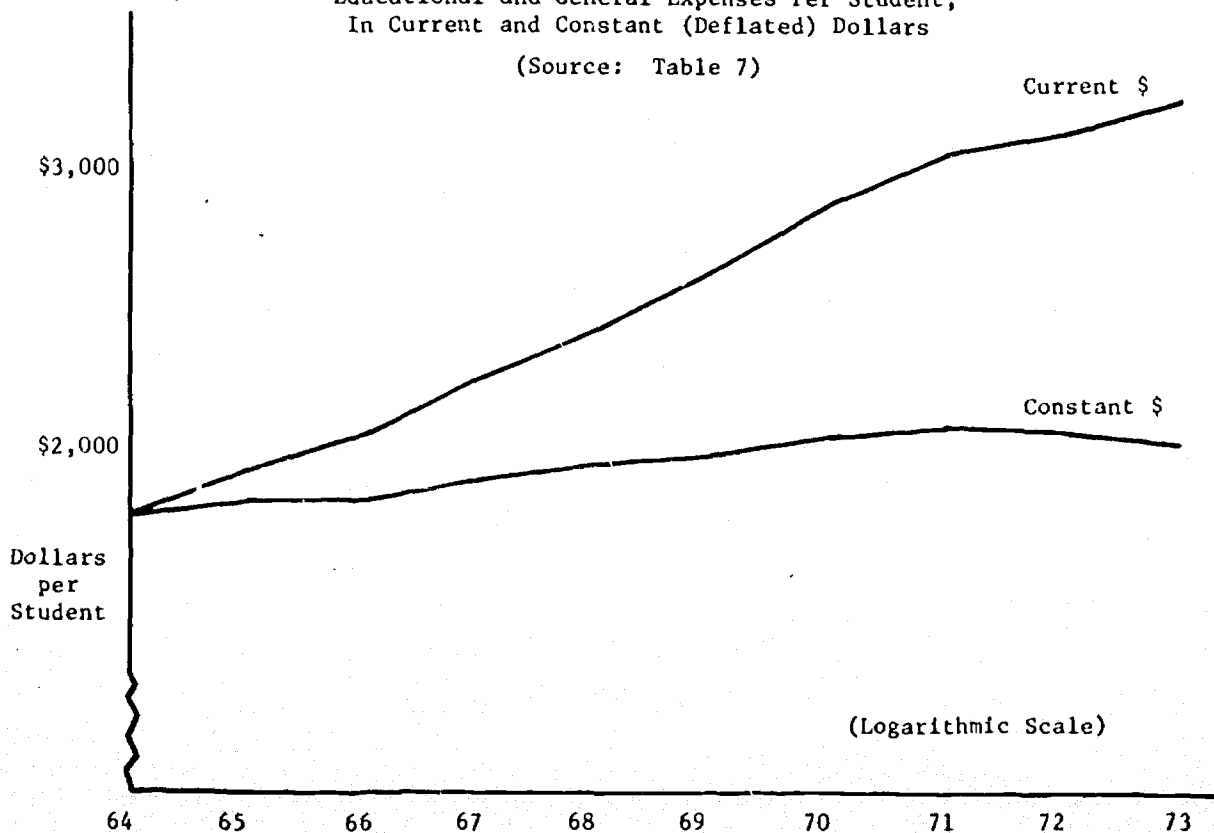
Educational and General Expenses Per Student, in Current and Constant (Deflated) Dollars, with Year-to-Year Growth Rates

Fiscal Year	Deflator Index	Current \$ Per Student	Constant \$ Per Student	Constant \$ Index	Year-to-Year Growth Rates
1964	100.0	\$1,849	\$1,849	100.0	---
1965	104.3	1,955	1,874	101.4	1.4%
1966	109.6	2,049	1,870	101.1	(0.2)
1967	115.1	2,228	1,936	104.7	3.5
1968	121.3	2,387	1,968	106.4	1.7
1969	129.3	2,580	1,995	107.9	1.4
1970	138.4	2,835	2,048	110.8	2.7
1971	145.8	3,026	2,075	112.2	1.3
1972	152.6	3,138	2,056	111.2	(0.9)
1973	161.2	3,282	2,036	110.1	(1.0)

GRAPH 9

Educational and General Expenses Per Student,
In Current and Constant (Deflated) Dollars

(Source: Table 7)



In some cases the reduction of dollars expended can be beneficial in all respects, with cost-savings realized that have little effect on academic program levels. In other cases, reductions in costs and program quality may go hand-in-hand. Higher education must develop means of making the critical distinction between these two situations. The recommendation that analyses of higher education combine indicators of financial and program objectives could prove to be one of the most valuable contributions of the National Commission's labors.

Unfortunately, it is exactly these proposed indicators of academic health that are least developed in higher education. And the data available for these 48 liberal arts colleges do not permit an adequate analysis of programmatic changes to be made, other than the gross measure of real resources. Therefore, this report confines itself to calling attention to the need for better academic program indicators. But comment can be made on the need to move beyond some of the superficial financial indicators now in widespread use. One important expansion of the concept of financial indicators involves the management of total assets in institutions of higher education.

More Comprehensive Indicators of Financial Health

Hans Jenny was one of the first to stress the need to include Balance Sheet information among the indicators of financial health that today typically center on current operations or the Income Statement.³¹ Van Alstyne has continued Jenny's theme when she writes:

Reports of current fund surpluses or deficits are incomplete measures of financial strength or weakness of nonprofit education institutions because current funds are only one of several funds that make up the accounting system of such institutions.³²

This emphasis on the total financial condition³³ of an institution becomes crucial if deficits begin to give conflicting signals on short-run trends. The National Commission undertook such an analysis for a

sample of 49 liberal arts colleges (not to be confused with the 48 colleges in this report). It found that from 1969 to 1972 the collective deficit for these 49 colleges was nearly eight million dollars. Yet total fund balances in the Balance Sheet of these colleges grew more than \$77 million during the same period. Only five colleges had both deficits and consistently declining fund balances; these were the schools clearly in financial distress, or worse.³⁴ Adding such an asset dimension is but one example of how deficit figures might be analyzed in conjunction with other information.

There are other useful barometers available in Balance Sheet data that have yet to be utilized on a wide scale across higher education. (Many of these measures are routinely used by financial officers within institutions.) Jenny has suggested the use of such standard business indicators as asset-to-debt ratios, debt service-expense ratios, and net worth ratios. He also recommends publication of market values of assets as well as the traditional book values, to analyze better the current viability of an institution.³⁵

It is important to know exactly how binding the legal restrictions on endowment are. Must we be forced to observe, to continue Jellema's analogy, a sinking ship with endowments flying high and intact? Is it significant that these 48 colleges have undergone a dramatic reversal in the growth of certain assets? After a decade when plant asset growth was considerably more rapid than that of endowment assets, from 1971 to 1973 (income-producing) endowment assets increased much faster than (expense-producing) plant assets.³⁶

The list of untapped indicators of potential value is long and promising. It is time that higher education expanded its thinking about the meaning and use of financial indicators.

The Need for Current Financial Information

Val Alstyne has made a strong argument for working to eliminate the time lag in policy decisions. Decision lag itself will never be completely

eliminated, but certainly improvement in information lag is possible. This study reveals a significant change in the financial behavior of these liberal arts colleges, change that differs considerably from other recently published data. The cure may be worse than the disease if, as Van Alstyne suggests, "policy recommendations (are) entirely out of phase with the changing realities."³⁷ One urgent task, then, is to develop means of bringing the right information to bear at the right time for future policy considerations.

VII. CONCLUSION: AT THE CROSSROADS

Bearing in mind Van Alstyne's admonition against confusing cycles with short-term trends, what can be suggested about the future of this sample of liberal arts colleges? Although a complex matrix of variables is involved, any one of which can throw off the most careful projection, the preceding analysis suggests at least three possible scenarios. The colleges currently find themselves at a crossroads, and may (1) move upward toward relative prosperity, (2) move downward toward financial ruin, or (3) drift along in a stagnant growth situation. Obviously many combinations of these three can occur, and in any sample of 48 liberal arts colleges all three will be represented at one college or another at the same time. The scenarios:

- (1) Van Alstyne's predictions prove accurate. Public and private support reach new heights. Income again grows at increasing rates, and with it expenditures. Continued cost-consciousness brings about a new era of real growth coupled with controls that prevent runaway acceleration of expenditures. Deficits are minimal. This is clearly the optimistic outlook, but is not without solid bases in certain trends.
- (2) The deficit-based thesis proves correct. The complex interactions causing deficits continue unabated. Failure in the private sector becomes more and more common. Liberal arts colleges operate in a recessionary environment. This pessimistic view also rests on a fairly solid foundation; witness the reported closings over the past five years.

- (3) Deficits become less common, but improvement in this indicator is brought about primarily by the halt of real growth over the short (and possibly long) run. The industry stabilizes, with almost no entry and exit in the private sector. Survival becomes the crucial operating principle, as manifested in balanced budgets. Some institutions are able to maintain the quality of their program intact; for others, quality deterioration becomes the modus vivendi.

The third scenario can be every bit as devastating, if not more so, than the second. Quality distress could prove to be the savior of the institution, but is a disservice to the student, and to society.

FOOTNOTES

- ¹ The National Commission on the Financing of Postsecondary Education, Financing Postsecondary Education in the United States (Washington, D. C.: Government Printing Office, 1974), pp. 188-93.
- ² William W. Jellema, From Red to Black? The Financial Status of Private Colleges and Universities (San Francisco: Jossey-Bass, Inc., 1973), p. ix.
- ³ The 1971 data are projections, not actual figures. Most of the first chapter of From Red to Black? is devoted to the discussion of deficits.
- ⁴ Earl F. Cheit, The New Depression in Higher Education (New York: McGraw-Hill, 1971).
- ⁵ Earl F. Cheit, The New Depression in Higher Education--Two Years Later (Berkeley: The Carnegie Commission on Higher Education, 1973), p. 16.
- ⁶ Carol Van Alstyne, An Economist Looks at Low Tuition, A Working Paper Prepared for Discussion at the Seminar on Low Tuition, Washington, D. C. February 14, 1974, p. 10.
- ⁷ Hans H. Jenny and G. Richard Wynn, The Golden Years: A Study of Income and Expenditure Growth and Distribution of 48 Private Four-Year Liberal Arts Colleges, 1960-1968 (Wooster, Ohio: The Ford Foundation and The College of Wooster, 1970).
- ⁸ In 1970 the average sample college spent \$4,330 per student, and had endowment assets of over \$17 million, to name but two indicators of wealth. Few of these institutions would be classified as one of Astin and Lee's "invisible colleges."
- ⁹ Hans H. Jenny and G. Richard Wynn, The Turning Point: A Study of Income and Expenditure Growth and Distribution of 48 Private Four-Year Liberal Arts Colleges, 1960-1970 (Wooster, Ohio: The College of Wooster, 1972).
- ¹⁰ Student Aid can also be thought of as a discount from the list price (student charges) on the income side of the ledger.
- ¹¹ See, for example, G. Richard Wynn, "Liberal Arts College Pricing: Has the Market Taken Over?," Liberal Education, 1972, 58 (3).

¹²Financing Postsecondary Education, p. 209.

¹³The New Depression--Two Years Later, p. 55.

¹⁴Financing Postsecondary Education, p. 202.

¹⁵ Enrollment has been a problem for several colleges in the sample, but enrollment growth has held up for the sample as a whole, running counter to trends for most four-year colleges. This occurs in part because this has always been a very low-growth sample; in part because many of these selective colleges can still control their enrollment patterns; in part because several have recently become co-educational, with attendant enrollment increases. Unfortunately, the enrollment data at hand do not conform to the strict standards applied in the earlier studies of these colleges. Per student data have been used in Section V, with caveats discussed in footnote 27.

¹⁶Chronicle of Higher Education, vol. 6, no. 20, February 22, 1972, p. 4.

¹⁷The New Depression--Two Years Later, p. 51.

¹⁸ Joseph Froomkin, et al., The Financial Prospects of the Postsecondary Sector, 1975 to 1990 (Washington, D. C.: Joseph Froomkin, Inc., November, 1973), p. iii.

¹⁹ Robert Atwell has used the term "academic deficits" to describe this condition in the major research universities. Robert H. Atwell, "The Adjustment of the Major National Universities to Budgetary Distress," unpublished manuscript (Washington, D. C.: American Council on Education, 1972); cited in Financing Postsecondary Education, p. 418.

²⁰The New Depression--Two Years Later, p. 71.

²¹From Red to Black?, pp. 155-156.

²² This approach begins to tread on the productivity issue. In contrast to conventional productivity notions, however, where more input per unit of output means falling productivity, Jenny has suggested the need for new and different measures for higher education. ("Postsecondary Education Is a Service Industry" and "Productivity in Postsecondary Education," Draft Reports Presented to the National Commission on the Financing of

Postsecondary Education, July, 1973.) Van Alstyne later adopted Jenny's approach in An Economist Looks at Low Tuition. Jenny suggests that more accurate measurement of quality of input and output might reveal increasing productivity. This underdeveloped subject demands much more research and attention than it is currently being given.

²³ The emphasis in the study has been methodological rather than the development of specific deflators. Hard data for liberal arts colleges have been used, but for other segments of higher education it will be confined to developing a methodological framework.

²⁴ William J. Baumol and Matityahu Marcus, Economics of Academic Libraries (Washington, D. C.: American Council on Education, 1973), p. 47.

²⁵ The Carnegie Commission has recommended that higher education cut its expenditure growth to a rate which is 2.5 percent greater than prevailing rates of inflation, apparently to be based on the Consumer Price Index (CPI). The 2.5 percent figure comes from historical trends for the higher education industry. (The Carnegie Commission on Higher Education, The More Effective Use of Resources: An Imperative for Higher Education [New York: McGraw-Hill, 1972], p. 4.) However, there are at least two reasons to question acceptance of 2.5 percent as a "norm." First, it is based on an historical period (1930-1960) of mild inflation compared to what we face today and what some economists are predicting we will face over the long term ahead. If long-run rates of inflation reach and hold at five percent or more, a constant 2.5 percent figure may be low for a labor-intensive industry such as higher education. Second, this approach fails to continue to its logical conclusion of measuring real resource growth. Cheit noted in his follow-up study that expenditures increased 3.9 percent faster than the CPI from 1967 to 1970, and only 0.5 percent faster from 1970 to 1973. (The New Depression--Two Years Later, p. 53.) What Cheit did not say, and what his data imply, is that real resources per student were probably declining during the latter period. What he calls "O'Neill's Law" (CPI + 2.5%) would indicate that rates of expense growth much below "O'Neill's Law" are indicators of declining real resources. The report on the Ford Foundation project will have more to say about this subject.

²⁶ The weighting structure utilized is based on that of the Commerce Department's Deflator for Private Higher Education, which the Ford research indicates is a fairly good approximation for these liberal arts colleges: 75 percent compensation and 25 percent nonpersonnel expenses (wage and price components, respectively). A wage index was constructed from AAUP faculty compensation data; again, the Ford research suggests that faculty compensation serves as a norm for general wage adjustments in these institutions. The Wholesale Price Index All Commodities component, a rough but fairly good proxy, is used for nonpersonnel expenses. The final deflator series appears in Tables 6 and 7.

- ²⁷ Until 1970, enrollment data were based on a measure of the extent to which each student paid tuition dollars (The Golden Years, pp. 124-25). This method tended to eliminate the problem of converting headcounts to full-time equivalents (FTE), and was applied consistently from 1960 to 1970. Unfortunately, it could not be replicated for 1971 to 1973. Therefore, published FTE data from 1970 to 1973 were used to construct an enrollment growth series, which showed slight increases in enrollment over these years. Since overstated enrollment data lead to understated expenses per FTE student, this enrollment growth was arbitrarily cut in half. Therefore, these data are stated conservatively, if anything, in showing that expenses per student declined slightly from 1970 to 1973. If the published enrollment data are accurate, Educational and General expenses per student have actually declined more than is indicated in Table 7 and Graph 9.
- ²⁸ The analysis should be carried farther by making a distinction between two types of inflation in higher education. The first is the inflation impacting on expenditures, which as demonstrated here reveals a decline in real resources per student since 1970. The second is inflation in the prices (Tuition and Fees) which the student is asked to pay to obtain the educational package offered by these colleges. This price increased 7.9 percent compounded annually in the 1960's, and at roughly the same rate in the early years of the 1970's. Looking at both measures, it was noted in The Turning Point that during the 1960's the student was paying 7.9 percent more per year to buy an educational package (real resources) which was increasing about two percent per student each year. Since 1970, however, the student has paid 25 percent more to buy a product which underwent a decline in real resources. This can only be interpreted as a serious deterioration of quality from the student viewpoint.
- ²⁹ Financing Postsecondary Education, pp. 220-24.
- ³⁰ Ibid., pp. 219-20.
- ³¹ Hans H. Jenny, The Consolidated Net Worth of Private Colleges: Recommendations of a Model (Wooster, Ohio: The College of Wooster, 1973). This excellent document should be considered a primer for those interested in financial administration of both private and public institutions of higher education.
- ³² An Economist Looks at Low Tuition, p. 6.
- ³³ Jenny argues that total asset management should become the central focus in financial administration. Similar to a business, colleges own assets

and incur obligations (liabilities). The greater the extent to which assets exceed obligations, the more room an institution has to maneuver. But unlike a business, colleges own certain fixed assets which cannot easily be sold (plant), and others which cannot legally be sold (restricted endowment). The key, then, is the free assets an institution has to manage. Financial distress measured in terms of free assets would tell us much more about when and if a beleaguered institution is about to cease operations. See The Consolidated Net Worth of Private Colleges.

³⁴ Financing Postsecondary Education, pp. 210-12.

³⁵ Consolidated Net Worth of Private Colleges, pp. 12, 14-15.

³⁶ The annual compound growth rates were:

<u>Fiscal Years</u>	<u>Plant Assets</u>	<u>Endowment Assets</u>
1961-1965	11.6%	9.7%
1966-1970	8.4	6.2
1971-1973	4.8	6.5
1973	4.5	8.4

³⁷ An Economist Looks at Low Tuition, p. 8.